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RE-SEALABLE CONTAINER

This invention relates to a re-sealable container and, particularly but not exclusively to a drinks container which has a ring pull for opening.

Re-sealable ring pull containers are known, however, usually such
5 containers have very sophisticated mechanisms for re-sealing the container or, alternatively, the mechanism is relatively simple but the re-sealing is not particularly efficient.

The present invention is directed to this problem and has as its object the provision of a very simple mechanism which gives a particularly
10 efficient and secure re-sealing of the container.

Thus and in accordance with the present invention therefore there is provided a container having an opening mechanism for opening at least a part of the container to allow access to the contents thereof, said opening mechanism comprising an opening member moveable by the user
15 into a position where it is urged against at least a part of the container, said urging causing said part to be separated from remaining container material to form an aperture through which the contents of the container can be accessed wherein said opening member is further moveable after the container has been opened, into a position where it engages with
20 securing means which acts to urge at least a part of the member into sealing contact with the aperture.

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With this arrangement it is possible to provide a re-sealable container with a simple opening and re-sealing mechanism with which a secure re-sealing of the container can be achieved.

The invention will now be described further by way of example only and with reference to the accompanying drawings, in which: -

Figs 1a and 1b: show a diagrammatic representation from above of one form of re-sealable container in accordance with the present invention in respectively an open and a closed position;

10 **Fig 2:** shows a diagrammatic representation from below of the re-sealable container of figure 1 in respectively an open and closed position: and

Fig 3: shows a perspective view from the top of the re-sealable container of figures 1 and 2.

15 Referring now to the figures, there is shown in figures 1a and 1b, a top 10 of a container 11 incorporating an opening mechanism 12 in the form of a ring pull.

The container 11 can take any desired shape, as appropriate, and can be formed from any suitable material as desired or as appropriate.

20 The ring pull 12 is securely anchored to the top of the container by a pin 13 which extends through the material of the top 10 of the container 11 as shown in figures 2a and 2b. The ring pull 12 comprises a shaped member having a depression 14 to form a finger grip at one end and an

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opposite end 16 which is shaped so as to be able to act on the container material when it is desired to open the container. An underside 16 of the ring pull 12 is shaped so as to fit in sealing relationship with a dispense aperture formed when the container is opened in a manner to be
5 hereinafter described.

In use, a container 11 is provided with an opening mechanism 12 as described above. The closed position of the container 11 is shown in figure 1a. To open the container 11, to gain access to the contents, a users finger is used to lift the ring pull mechanism 12 at the end of the
10 ring pull in which the depression 14 is provided thus lifting of the ring pull 12 causing the ring pull to pivot about the attachment pin 13. Further lifting of the ring pull brings the opposite end 16 of the ring pull 12 into contact with the container material.

In the area 17 of the container top where the opposite end 16 of
15 the ring pull contacts on lifting of the ring pull, is provided, an area of material which is formed so as to be separable from the remainder of the material from which the container is formed, for example by being relatively thin or otherwise adapted. Therefore as the ring pull 12 is lifted, the pressure exerted by the opposite end 16 on this area 17
20 separates the material in that area from the remaining container material to form a dispense aperture 18 through which the contents of the container can be accessed. The area of material 17 may separate

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completely from the surrounding material or may remain attached to the remaining material.

The ring pull 12 can now be lowered so as to allow the contents of the container to be accessed. This open position is shown in figure 1b.

5 If it is desirable to re-seal the container in order that the contents cannot escape from the container through the dispense aperture 18, this can be achieved as follows.

10 The ring pull 12 is arranged to be rotatable relative to the remaining parts of the container about the pin 13 by which it is anchored to the container.

15 In order to seal the aperture 18 after the container has been opened, the ring pull 12 is rotated about the pin 13 until the finger grip part of the member overlies the aperture. The finger grip part can then be moved downwardly into engagement with the dispense aperture 18 to close off the opening. It will be appreciated that such a mechanism will close off in a non-secure manner the opening but in order to increase the security of the sealing, in the present arrangement, a ramp surface 19 (see figure 3) is provided on the container top. The ramp surface 19 may be formed integrally with the container or may be attached thereto as a separate part. Alternatively the ramp surface 19 may be provided on the ring pull. The ramp surface is shown in figure 3.

20 In either case, the ramp surface 19 is arranged so as to be inclined upwardly away from the dispense aperture 18 whereby, as the ring pull

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12 is rotated, the opposite end 16 of the ring pull 12 engages the ramp 19 and is guided upwards up the ramp 19 as the rotational movement continues. This upward movement of the opposite end 16 of the ring pull 12, results in an equivalent downward movement of the finger grip end of
5 the ring pull which is urged downwardly into sealing engagement with the aperture thereby increasing the sealing effect.

The container can be further modified so as to include depressions 21 adjacent to the side of material 17 and the finger grip of the ring pull so as to enable the finger grip to be lifted for movement either to open
10 the container or to remove the ring pull from the dispense aperture when the container is closed to allow access.

It will of course be realised that the arrangement of the present invention will offer a significantly greater sealing to an opened container as compared to existing arrangements.

15 Furthermore, the opening mechanism is almost as simple in its construction as a non-sealing conventional ring pull opening mechanism and therefore it will be appreciated that the additional costs to manufacturers of such containers to produce re-sealable containers with guard sealing is relatively small as compared to existing more elaborate or
20 sophisticated re-sealing arrangements.

It is of course to be understood that the invention is not intended to be restricted to the details of the above embodiments which are described by way of example only.

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Thus for example, the end 16 of the ring pull mechanism can be formed wholly or partly in the form of an elongate tongue which extends substantially further across the aperture 18 than the end 16 shown in figures 1 to 3. Forming the end 16 in this way facilitates use and
5 operation of the mechanism since the end 16 is easier for a user to grasp and move the ring pull between open and closed positions. Also, a ring pull mechanism which incorporates an elongate tongue can allow a lever effect to be exerted by allowing the user to grasp the tongue 16 and as the tongue is lifted, the finger grip part of the mechanism is forced into
10 sealing relationship with the dispense aperture 18 by a pivot motion about a point between ends of the mechanism.